GB LFC Block Operational Agreements

Revision History

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **V0.1** | **05.04.2018** |  | **NGET proposal for public consultation**  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

|  |
| --- |
| **Disclaimer** This document, provided by NGET, is the draft for stakeholder consultation of the NGET proposal for the GB LFC Block Operational Agreements in accordance with Article 119 of Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation. |

Table of Contents

[Introduction 4](#_Toc510529356)

[Whereas 4](#_Toc510529357)

[TITLE 1 General Provisions 5](#_Toc510529358)

[Article 1 Subject matter and scope 5](#_Toc510529359)

[Article 2 Definitions and interpretation 5](#_Toc510529360)

[TITLE 2 Methodologies, Conditions and Values developed by NGET to satisfy the needs of the SOGL within LFCBOA for GB, which are subject to OFGEM regulatory authority approval 5](#_Toc510529361)

[Article 3 Ramping restrictions for active power output in accordance with SOGL Article 137(3) and (4) 5](#_Toc510529362)

[Article 4 The FRR dimensioning rules in accordance with SOGL Article 157(1) 5](#_Toc510529363)

[Article 5 Coordination actions aiming to reduce the Frequency Restoration Control Error as defined in SOGL Article 152(14) 6](#_Toc510529364)

[Article 6 Measures to reduce the Frequency Restoration Control Error (FRCE) by requiring changes in the active power production or consumption of power generating modules and demand units in accordance with SOGL Article 152(16). 6](#_Toc510529365)

[TITLE 3 Methodologies, Conditions and Values developed by NEGT within LFCBOA for GB to meet the objectives of the SOGL but not requiring OFGEM approval 7](#_Toc510529366)

[TITLE 4 Final Provisions 7](#_Toc510529367)

[Article 7 Timescale for implementation 7](#_Toc510529368)

[Article 8 Language 7](#_Toc510529369)

**Introduction**

This LFC Block Operational Agreements (hereafter referred to as “LFCBOA”) document applies to the LFC Block of Great Britain and contains methodology texts listed in Article 119 of Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (hereafter referred to as “SOGL”).

This LFCBOA is implemented in GB taking into account:

**Whereas**

1. This document is a proposal developed by National Grid Electricity Transmission (hereafter referred to as “NGET”) regarding a LFCBOA document for Great Britain for GB.
2. This proposal takes into account the general principles and goals set in Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation as well as 2015/1222 establishing a guideline on capacity allocation and congestion management (hereafter referred to as “Regulation 2015/1222”), and Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13  July 2009 on conditions for access to the network for cross-border exchanges in electricity (hereafter referred to as “Regulation (EC) No 714/2009”). The goal of SOGL is to safeguard operational security, frequency quality and the efficient use of the interconnected system and resources.
3. SOGL, Part IV, Load Frequency Control & Reserves section, recognises the need for a degree of flexibility to cater for physics of scale in different synchronous areas as well as specific time varying influence of network connectivity and technology in the energy mix in determining how system operators’ processes and the reserve provider services meet the system quality criteria. This flexibility is achieved through the development of agreements and methodologies.
4. According to Article 6 (6) of the SOGL, the expected impact of the GB LFCBOA proposal on the objectives of the SOGL has to be described. It is presented below. The LFCBOA proposal generally contributes to the achievement of the objectives of the SOGL. In particular the LFCBOA serves the objective of ensuring the conditions for maintaining a frequency quality level for the synchronous area GB; for determining common load-frequency control processes and control structures within GB; ensure conditions for maintaining operational security; the publication of GB methods and specific values in the common language of SOGL promotes transparency and reliability of information on transmission system operation; facilitating greater cross-border cooperation and the efficient operation of the electricity transmission system in the Union.
5. Furthermore, the methodologies contained in this LFCBOA proposal shall ensure application of the principles of proportionality and non-discrimination; transparency; optimisation between the highest overall efficiency and lowest total costs for all industry stakeholders and consumers; and use of market-based mechanisms as far as possible, to promote frequency quality and operational security.
6. In conclusion, the methodologies contained in this LFCBOA proposal shall contribute to the general objectives of the SOGL to the benefit of all TSOs, the Agency, regulatory authorities, market participants and the end consumers.

SUBMIT THE FOLLOWING LFC BLOCK OPERATIONAL AGREEMENTS PROPOSAL TO THE GB REGULATORY AUTHORITY, OFGEM:

1. General Provisions
2. Subject matter and scope
3. This LFCBOA document for Great Britain contains:
	1. Title 2: Those articles referenced from both 119 and 6(3). These are subject to OFGEM approval and public consultation from Article 11.
	2. Title 3: Those articles referenced in Article 119 but not found in Article 6 or 11. These articles are not subject to either OFGEM approval or public consultation.
4. Definitions and interpretation
5. For the purposes of this proposal, the terms used shall have the meaning of the definitions included in Article 3 of Regulation 2017/1485, Article 2 of Regulation 2015/1222 and the other items of legislation referenced therein.

1. Methodologies, Conditions and Values developed by NGET to satisfy the needs of the SOGL within LFCBOA for GB, which are subject to OFGEM regulatory authority approval
2. Ramping restrictions for active power output in accordance with SOGL Article 137(3) and (4)
3. Ramping Restrictions in GB are defined in the GB Grid Code.
4. NGET may enter into agreements with specific parties to modify these ramping restrictions.
5. NGET, in order to prevent entering or remaining in an emergency state, may restrict equitably the ramp rates of all interconnectors between the same two synchronous area.
6. Within 30 days of the incident, NGET shall prepare a report containing a detailed explanation of the rationale, implementation and impact of this action and submit it to the relevant regulatory authority in accordance with Article 37 of Directive 2009/72/EC and neighbouring TSOs, and make it available to the significantly affected system users.
7. The FRR dimensioning rules in accordance with SOGL Article 157(1)
8. The NETS SQSS specifies the standards which are used to dimension the GB FRR requirements.
9. NGET shall determine the reserve capacity for FRR required for the GB synchronous area at least daily according to system conditions, and refine this all the way through to real time.
10. Coordination actions aiming to reduce the Frequency Restoration Control Error as defined in SOGL Article 152(14)
11. This article is not applicable to GB since the LFC Block Structure has a single LFC Block and single LFC Area within the Synchronous Area.
12. Measures to reduce the Frequency Restoration Control Error (FRCE) by requiring changes in the active power production or consumption of power generating modules and demand units in accordance with SOGL Article 152(16).
13. Measures to reduce FRCE in GB are defined in the GB Grid Code
14. NGET may enter into agreements, where necessary, with specific parties to supplement these measures.
15. Methodologies, Conditions and Values developed by NEGT within LFCBOA for GB to meet the objectives of the SOGL but not requiring OFGEM approval

<Text>

|  |
| --- |
| *Placeholder / Notice: The remaining methods from SOGL Article 119 will be inserted in this section prior to completion of this document by September 2018.*  |

1. Final Provisions
2. Timescale for implementation
3. The LFCBOA will enter into force 3 months after its approval by the GB National Regulatory Authority, OFGEM (not earlier than 14th June 2019) in line with SOGL article 119(2).
4. Language
5. The reference language for this LFCBOA shall be English.

|  |
| --- |
| Please note: The Article numbers in Title 4 are subject to change once the Articles in Title 3 are drafted and added to this document. |